



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,853	08/09/2006	Olivier Larcher	1022702-000293	6966
21839	7590	10/23/2008	EXAMINER	
BUCHANAN, INGERSOLL & ROONEY PC			ZIMMER, ANTHONY J	
POST OFFICE BOX 1404				
ALEXANDRIA, VA 22313-1404			ART UNIT	PAPER NUMBER
			1793	
			NOTIFICATION DATE	DELIVERY MODE
			10/23/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No.	Applicant(s)	
	10/568,853	LARCHER ET AL.	
	Examiner	Art Unit	
	ANTHONY J. ZIMMER	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 15 September 2008.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 16-35 is/are pending in the application.

4a) Of the above claim(s) 24-35 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 16-23 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____ .	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I in the reply filed on 9/15/2008 is acknowledged. The traversal is on the ground(s) that there is no burden on the examiner. This is not found persuasive because applicant's arguments are directed toward restriction practice in applications filed under 35 U.S.C. 111(a); however, the instant application is a national stage application filed under 35 U.S.C. 371 pursuant to unity of invention practice under PCT Rules 13.1 and 13.2. See MPEP 1893.03(d). The inventions are held to lack unity for the reasons set forth in the Restriction Requirement of 8/13/2008.

Therefore, the requirement is still deemed proper and is therefore made **FINAL**.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16-18 and 20 rejected under 35 U.S.C. 102(b) as being anticipated by the journal article by Vidmar et al.

In regard to claims 16-18, Vidmar teaches specific examples of compositions based on cerium and zirconium oxides with surface areas of 79 m²/g and higher having Ce/Zr atomic ratios in the range of the claim. See Table 1. Though the reducibility as

defined in the instant specification is not mentioned in Vidmar, the catalysts disclosed therein would have a reducibility in the range of that instantly claim because the composition of the mixed oxide and the surface area of the catalysts in Vidmar are the same as those of the instant invention, thus the other properties must also be the same. Also, properties of identical chemical composition can not have mutually exclusive properties. See MPEP 2112.01.

In regard to claim 20, Vidmar teaches the composition further comprising yttrium and lanthanum. See Table 1.

Claims 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by the journal article by Gonzalez-Velasco et al.

In regard to claims 16-19, Gonzalez-Velasco teaches specific examples of compositions based on cerium and zirconium oxides with surface areas of $85\text{ m}^2/\text{g}$ and higher having Ce/Zr atomic ratios in the range of the claim. See Table 2. Though the reducibility as defined in the instant specification is not mentioned in Gonzalez-Velasco, the catalysts disclosed therein would have a reducibility in the range of that instantly claim because the composition of the mixed oxide and the surface area of the catalysts in Gonzalez-Velasco are the same as those of the instant invention, thus the other properties must also be the same. Also, properties of identical chemical composition can not have mutually exclusive properties. See MPEP 2112.01.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vidmar.

Vidmar anticipates the limitations of claim 16 and teaches a lanthanide metal other than cerium (see the 102 rejection above), but fails to teach a supported precious metal. However, Vidmar teaches using cerium/zirconium oxide as a support in a three-way catalyst (TWC), and the purpose of Vidmar is to evaluate said oxide for such an application. See the Introduction and Discussion sections of Vidmar. TWCs routinely contain precious metals (such as those in claim 23), thus it would have been obvious to one of ordinary skill in the art to employ the use of a precious metal in order to form a three way catalyst. Furthermore, Vidmar mentions rhodium supported on such a cerium/zirconium oxide. See the left-hand column on page 167, last full paragraph.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gonzalez-Velasco.

Gonzalez-Velasco teaches the limitations of claim 16 (see 102 rejection above), but fails to support precious metals. However, Gonzalez-Velasco teaches using cerium/zirconium oxide as a support in a three-way catalyst (TWC), and the purpose of Gonzalez-Velasco is to evaluate said oxide for such an application. See the Introduction section of Gonzalez-Velasco. TWCs routinely contain precious metals (such as those in claim 23), thus it would have been obvious to one of ordinary skill in the art to employ the use of a precious metal in order to form a three way catalyst.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 16-22 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 17, 19, and 28 of copending Application No. 10/549531. Although the conflicting claims are not identical, they are not patentably distinct from each other because: The composition of the metal oxide cited in the instant claims is met by the limitations of the cited claims of 10/549531. Though the composition of 10/549531 is cited as having a certain specific surface area after calcination, such a composition would have a specific surface area in the range of the instant claims as even after calcination, which decreases surface area, the claims cite a surface area higher than the minimum required by the instant claim(s). Though the reducibility as defined in the instant specification is not mentioned in the claims of 10/549531, the catalysts disclosed therein would have a reducibility in the range of that instantly claimed because the composition of the mixed oxide and the surface area (as explained above) of the catalysts in 10/549531 are the same as those of the instant invention, thus the other properties must also be the same. Also, properties of identical chemical composition can not have mutually exclusive properties. See MPEP 2112.01.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY J. ZIMMER whose telephone number is

Art Unit: 1793

(571)270-3591. The examiner can normally be reached on Monday - Friday 7:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ajz

/Steven Bos/
Primary Examiner, Art Unit 1793